

WE CLAIM:

- 1           1.       A method of tracking a security state for an intermodal container through a  
2 global supply chain, comprising:  
3           initiating a security state for the intermodal container with information submitted by a  
4           first trusted agent located at a first checkpoint;  
5           continuously monitoring the security state of the container during transport between  
6           the first checkpoint and a second checkpoint, the security state adapted to  
7           change responsive a security breach; and  
8           sending the security state to a second trusted agent located at the second checkpoint  
9           for validation.
- 1           2.       The method of claim 1, wherein the step of initiating the security state  
2 comprises initiating the security state to a secure state responsive to an inspection by the first  
3 trusted agent.
- 1           3.       The method of claim 1, wherein the step of continuously monitoring the  
2 security state comprises changing the security state responsive to a security breach defined  
3 by security business rules.
- 1           4.       The method of claim 1, wherein the step of initiating the security state  
2 comprises initiating the security state with a required body of information comprising an  
3 expected transport route between the first checkpoint and the second checkpoint, and wherein  
4 the step of monitoring the security state comprises changing the security state if the actual  
5 transport route deviates from the expected transport route.
- 1           5.       The method of claim 1, wherein the step of initiating the security state  
2 comprises initiating the security state with a required body of information comprising  
3 information related to authorized unsealing of the container, and wherein the monitoring the  
4 security state comprises changing the security state if the container is unsealed without  
5 authorization between the first checkpoint and the second checkpoint.

1           6.       The method of claim 1, wherein the step of initiating the security state  
2 comprises initiating the security state with the required body of information comprising  
3 information concerning a unique identifier assigned to a seal that locks the container, and  
4 wherein the step of monitoring the security state comprises using the unique identifier to  
5 continually monitor the seal for a status.

1           7.       The method of claim 6, wherein the status comprises one from the group  
2 consisting of: door open, attempt to open door, door closed, door locked, right door open, and  
3 more than one door open.

1           8.       The method of claim 6, wherein the status comprises an environmental state  
2 from the group consisting of: temperature, humidity, vibration, shock, light, and radiation.

1           9.       The method of claim 1, further comprising the steps of:  
2 detecting the security breach; and  
3 resetting the security state responsive to the second agent submitting an indication  
4 that the container was resecured.

1           10.      The method of claim 1, further comprising the steps of:  
2 receiving an inspection request from an authority; and  
3 changing the security state responsive to the inspection request.

1           11.      The method of claim 1, further comprising the steps of:  
2 submitting a required body of information, including the information, to an authority;  
3 wherein the authority sends the inspection request responsive to the required body of  
4 information.

1           12.      The method of claim 1, wherein the first agent is located at an origin port of  
2 an export country and the second agent is located at a destination port of an import country.

1           13.      The method of claim 1, wherein the step of monitoring comprises the steps of:  
2 receiving monitor information from a first reader at the first checkpoint through a first  
3 control center;

4 receiving monitor information from a second reader on a transportation device; and  
5 receiving monitor information from a third reader at the second checkpoint through a  
6 second control center.

1 14. The method of claim 1, wherein the container comprises an RFID (Radio  
2 Frequency IDentification) tag, and the first, second, and third readers each comprise an RFID  
3 reader.

1 15. A security state system for tracking a container through a global supply chain,  
2 comprising:  
3 a required body of information module to store information concerning the container  
4 submitted by a first trusted agent located at a first checkpoint; and  
5 a security state module, coupled to the information module, the security state module  
6 initiating the security state based on the information, continuously monitoring  
7 the security state between the first checkpoint and a second checkpoint, the  
8 security state adapted to change responsive to a security breach, and the  
9 security state module sending the security state to a second trusted agent at the  
10 second checkpoint for validation.

1 16. The system of claim 15, wherein the security state module initiates the  
2 security state to a secure state responsive to an inspection by the first trusted agent.

1 17. The system of claim 15, wherein the security state module further comprises  
2 to change the security state responsive to a security breach defined by security business rules.

1 18. The system of claim 15, wherein the information comprises an expected  
2 transport route between the first checkpoint and the second checkpoint, and wherein the  
3 security state module changes the security state if the actual transport route deviates from the  
4 expected transport route.

1 19. The system of claim 15, wherein the information comprises authorized  
2 unsealing of the container, and wherein the security state module changes the security state if

3 the container is unsealed without authorization between the first checkpoint and the second  
4 checkpoint.

1 20. The system of claim 15, wherein the information comprises a unique identifier  
2 assigned to a seal that locks the container, and wherein the security state module uses the  
3 unique identifier to continually monitor the seal for a status.

1 21. The system of claim 20, wherein the status comprises one from the group  
2 consisting of: door open, attempt to open door, door closed, door locked, right door open, and  
3 more than one door open.

1 22. The system of claim 20, wherein the status comprises an environmental state  
2 from the group consisting of: temperature, humidity, vibration, shock, light, and radiation.

1 23. The system of claim 15, further comprising a seal device to detect a security  
2 breach, wherein the security state module resets the security state responsive to the second  
3 agent submitting an indication that the container was resecured.

1 24. The system of claim 15, wherein the security state module changes the  
2 security state responsive to receiving an inspection request from a customs control center.

1 25. The system of claim 15, wherein the security state module submits a required  
2 body of information, including the information, to a customs control center, and receives an  
3 inspection request responsive to the required body of information.

1 26. The system of claim 15, wherein the first agent is located at an origin port of  
2 an export country and the second agent is located at a destination port of an import country.

1 27. The system of claim 15, wherein the required body of information module  
2 receives the information from a first reader at the first checkpoint through a first control  
3 center, the security state module receives continuous monitoring information from a second  
4 reader; and receives a validation confirmation from a third reader at the second checkpoint  
5 through a second control center.

1           28.     The system of claim 15, wherein the container comprises an RFID (radio  
2 frequency identification) tag, and the first, second, and third readers comprise an RFID  
3 reader.

1           29.     A computer product, comprising: a computer-readable medium having  
2 computer program instructions and data embodied thereon for a method of tracking a security  
3 state for an intermodal container through a global supply chain, comprising:

4           initiating a security state for the intermodal container with information submitted by a  
5           first trusted agent located at a first checkpoint;

6           continuously monitoring the security state of the container during transport between  
7           the first checkpoint and a second checkpoint, the security state adapted to  
8           change responsive a security breach; and

9           sending the security state to a second trusted agent located at the second checkpoint  
10          for validation.

1           30.     The computer product of claim 29, wherein the step of initiating the security  
2 state comprises initiating the security state to a secure state responsive to an inspection by the  
3 first trusted agent.

1           31.     The computer product of claim 29, wherein the step of continuously  
2 monitoring the security state comprises changing the security state responsive to a security  
3 breach defined by security business rules.

1           32.     The computer product of claim 29, wherein the step of initiating the security  
2 state comprises initiating the security state with a required body of information comprising  
3 information concerning a unique identifier assigned to a seal that locks the container, and  
4 wherein the step of monitoring the security state comprises using the unique identifier to  
5 continually monitor the seal for a status.

1           33.     The computer product of claim 29, further comprising the steps of:  
2 detecting the security breach; and  
3 resetting the security state responsive to the second agent submitting an indication

4                   that the container was resecured.

1           34.     The computer product of claim 29, further comprising the steps of:  
2           receiving an inspection request from an authority; and  
3           changing the security state responsive to the inspection request.

1           35.     The computer product of claim 29, further comprising the steps of:  
2           submitting a required body of information, including the information, to an authority;  
3           wherein the authority sends the inspection request responsive to the required body of  
4           information.

1           36.     The computer product of claim 29, wherein the first agent is located at an  
2           origin port of an export country and the second agent is located at a destination port of an  
3           import country.